

Recommendations for
Improving School Health Education
and Reducing Health Risks for
Missouri Students

HEALTHY MISSOURI
Healthy Students
Healthy Schools

► *Findings from the*
1994 Missouri School Health
Education Profile *and*
1995 Missouri Youth Risk
Behavior Survey

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Missouri Department of
Elementary and Secondary Education
Robert E. Bartman, Commissioner of Education

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Foreward

It has become obvious that educators cannot ignore the impact of new health risks on students. Today, many teachers and schools must deal regularly with problems such as teen pregnancy, drug and alcohol abuse, poor nutrition, child abuse, and emotional disturbances. When students bring such problems to school with them, educators must respond to both the personal and educational consequences.

There is widespread agreement that better education and prevention are the keys to reducing health risks for young people. We hope this report provides a useful snapshot of health education programs in Missouri's public schools and—more importantly—suggests steps we can take to reduce health risks for all young people in Missouri.

Robert E. Bartman
Commissioner of Education

About this Report

- *Summaries of the 1994 School Health Education Profile and the 1995 Youth Risk Behavior Survey*
- *Implications*
- *Recommendations*

Since 1988, the Missouri Department of Elementary and Secondary Education has maintained a cooperative agreement with the U.S. Centers for Disease Control and Prevention (CDC) for providing assistance to schools in improving comprehensive health education programs, including HIV-prevention education. Two activities of the agreement are to periodically collect information about the status of secondary school health and HIV-prevention education programs and to assess the degree to which high school students are engaging in various health risk behaviors.

The School Health Education Profile and the Youth Risk Behavior Survey were designed and validated by the CDC in collaboration with state and local education personnel. The School Health Education Profile surveys randomly selected secondary principals and health education teachers. Students in the 9th through 12th grades from randomly selected high



schools completed the Youth Risk Behavior Survey. Participation in both surveys was voluntary and anonymous. Responses were confidential; no school, principal, teacher or student was identified when results were compiled. Sufficient data were collected to assure that the results are representative of schools and students in Missouri.

Not all of the data from the two surveys are being reported. Summaries of the 1994 School Health Education Profile and the 1995 Youth Risk Behavior Survey, implications of the key findings from the surveys and recommendations for action are also included in this report.

The intent of the report is to generate thoughtful consideration of how secondary school health and HIV-prevention education can be improved to ensure that all students have the opportunity to learn how to live healthfully.

Introduction

“Too many students are engaging in behaviors which put them at risk of immediate or future health problems—or death.”

Many students in Missouri secondary schools are engaging in health-enhancing behaviors such as regular vigorous physical activity and eating a diet that includes fruits and vegetables. Unfortunately, too many students also are engaging in behaviors which put them at risk of immediate and future health problems or death.

Of concern for immediate health problems are behaviors which result in suicide, physical injury or death due to violence and car crashes, unintended pregnancy, infection with HIV (the AIDS virus) and infection with other sexually transmitted diseases (STDs). Some students also are establishing behaviors such as regular alcohol and tobacco use, eating foods high in fat, and not participating in regular physical activity which puts them at risk for cardiovascular disease later in life. The use of alcohol and other drugs also contributes to other health risk behaviors such as violence, drinking and driving and early and unprotected sexual activity.

The goal of school health education is to help students acquire the knowledge and skills needed to be healthy,

active and productive throughout life. Schools, however, cannot be solely responsible for educating students about their health. Schools, parents, peers, churches and community organizations must work together to ensure students have multiple opportunities to learn how to live safely and healthfully.

Research has shown that programs with demonstrated effectiveness in improving student health knowledge, skills and behaviors appear to have several elements in common:

- Influences on health behaviors such as peer interaction and media messages are addressed
- Support for school health education is provided
- An adequate amount of classroom instruction is provided
- The content of classroom instruction is comprehensive
- Teacher preparation is thorough and effective

THIS REPORT ADDRESSES:

- What the research says about effective programs
- The status of Missouri secondary schools, as indicated by the findings of the School Health Education Profile and the Youth Risk Behavior Survey
- Implications

How are we doing?

Influences on health behaviors

WHAT THE RESEARCH SAYS

Effective programs involve students in decisions about programs and in presenting positive messages to their peers. Activities are included to educate about misperceptions of peer social norms and to provide reinforcement that not all students engage in unhealthy behaviors. Effective programs also help students realistically recognize their vulnerability to health risk behaviors. Effective programs challenge media messages that promote unhealthy behaviors and replace them with positive messages.

STATUS IN MISSOURI:

One-half of the secondary schools did not use trained peer educators to help teach about health. The most common method of involving students in health education activities, in addition to classroom instruction, was through school newspaper articles. Forty-one percent of lead health education teachers taught about perceptions of vulnerability and social norms related to HIV/AIDS risk behaviors. No data were collected about how schools addressed media influences.

IMPLICATIONS

Because some schools were not involving students in peer education or other activities to reinforce health instruction, opportunities may have been missed for students to assume leadership and take responsibility for educating themselves and others. Also, teachers need to help students change inaccurate perceptions and to understand that specific behaviors make them vulnerable to health risks.

Support for school health education

WHAT THE RESEARCH SAYS

Support is provided by school administrators, parents, community health departments, churches and other youth-serving organizations. Programs that have someone designated to coordinate efforts within the school and with the community are more effective. Additionally, effective programs are supported by school policies which reinforce classroom instruction.

STATUS IN MISSOURI:

Most secondary principals reported that inservice training and professional development for teachers was supported by the school or district. Almost one-third reported that no one was designated to coordinate health education in the school. The majority of principals reported that parents had provided either positive or no feedback about the school health education program. The majority of schools did not have an active advisory council. Of those that did, almost two-thirds did not have parents represented, and fewer had community organizations represented. Almost a third of the lead health education teachers reported that they did not involve parents in health instruction.

IMPLICATIONS

Although the vast majority of schools and districts provided support for teachers to participate in professional development, about one-fourth of the teachers had not attended an inservice program during the previous two years. Health education is a dynamic field requiring constant updating and refinement. To be effective, teachers need to participate in professional development regularly, and someone in the school needs to coordinate efforts to keep the curriculum current and aligned with other grade levels.

Community members, especially parents, did not appear to be very involved in health education programs. What is taught in school must be reinforced outside the classroom if healthy behaviors are to be promoted and risky behaviors prevented.

Amount of classroom instruction

WHAT THE RESEARCH SAYS

Studies show that students' health knowledge can be increased with only a few hours of instruction. However, to achieve improvements in self-reported behaviors, more time is necessary (approximately 40 to 50 hours per year in several consecutive school years).

STATUS IN MISSOURI

The majority of Missouri secondary schools were providing more than one-half year of health education which should result in more than 40 hours of instruction. However, only about 10 percent of senior high schools were scheduling health education for 11th and 12th grade students.

IMPLICATIONS

Secondary schools may be providing an adequate amount of instruction for students, except for those in the 11th and 12th grades. Because of the percentage of students in the 11th and 12th grade who reported engaging in some high-risk behaviors, lack of adequate instruction in these grades is a serious concern.

Content of classroom instruction

WHAT THE RESEARCH SAYS

Providing only factual information about a variety of health topics is not enough to influence student behavior. Effective programs provide repeated opportunities for students to learn, at different developmental stages, health-enhancing skills such as communication (e.g., refusal, resistance, conflict resolution), decision-making and problem-solving, goal setting and stress management. The content of effective programs also is sensitive to cultures and community values.

STATUS IN MISSOURI

Secondary students were receiving a great deal of health information but fewer opportunities to learn skills. This conclusion is evidenced by the high percentage of teachers who taught knowledge in a variety of health topics, while a much smaller percentage also taught skills.

IMPLICATIONS

Some high school students may not possess the skills needed to help them make healthy choices. Skills-based instruction, along with factual and necessary information, should help students be better prepared to make responsible decisions about their health.

Teacher preparation

WHAT THE RESEARCH SAYS

Teachers receiving adequate preparation through preservice and inservice programs are more likely to be motivated to teach health education well and to fully implement a comprehensive curriculum.

STATUS IN MISSOURI

The majority of lead health education teachers were experienced physical education teachers who had appropriate credentials to teach health. While most had attended inservice on various health topics during the previous two years, many more expressed interest in attending inservice training, particularly on preventing violence, suicide, HIV infection and pregnancy, and alcohol, tobacco and other drug use. However, one-fourth of the teachers had not attended an inservice during the previous two years.

IMPLICATIONS

The teachers' interest in receiving training related to critical health issues suggested a recognition that students were engaging in health risk behaviors. Their concerns were reinforced by data from the Youth Risk Behavior Survey. Universities, the state department of education, state and local health departments and community-based organizations must collaborate to meet the need for providing teacher inservice statewide.

Recommendations for Action

Based on the findings of the two surveys and what research says about effective programs, the following recommendations should be considered:

1. Increase the involvement of parents, peers and members of the community by activating a comprehensive school health advisory committee, which can assist in identifying ways to improve the health education program.
2. Continue providing support for teachers to participate in professional development opportunities and encourage them to participate regularly to update and refine their skills.
3. Improve the content of school health instruction by using curricula that are comprehensive, skills-based, developmentally appropriate and culturally sensitive. Lack of skills-based instruction may be due, in part, to schools relying on textbooks which traditionally focus on dissemination of information. When possible, schools should rely less on textbooks and more on curricula that have been shown to be effective in affecting students' knowledge, skills and behaviors. When textbooks are used, skills activities should be incorporated with the instruction.
4. Increase the amount of health education available for 11th and 12th graders through appropriately integrated instruction and reinforcement activities such as peer education.
5. Use the "Healthy Active Living" Curriculum Framework to incorporate the "Show-Me Standards" into the district's curriculum and to assist with developing performance assessments.

6. Review the "Show Me Goals 2000 State Plan" for suggested initiatives to improve:

- Curriculum and Assessment
- Professional Development
- Health and Human Services Programs
- Parent and Community Involvement

Note: the "Show-Me Standards," Goals 200 State Plan, and the Healthy Active Living Curriculum Framework are published by the Missouri Department of Elementary and Secondary Education, Division of Instruction, P.O. Box 480, Jefferson City, MO 65102

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1994 Missouri School Health Education Profile

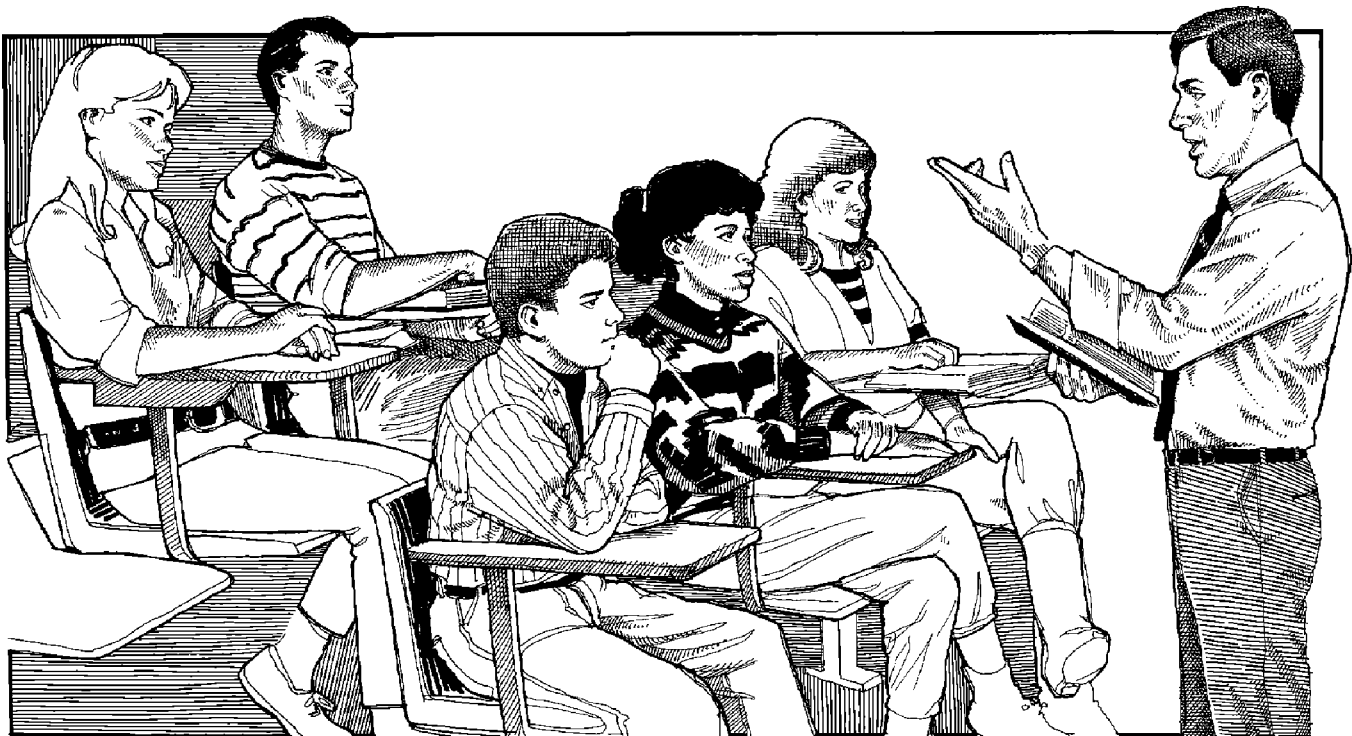
Executive summary

The 1994 School Health Education Profile Survey was conducted as a requirement for a cooperative agreement between the Missouri Department of Elementary and Secondary Education and the federal Centers for Disease Control and Prevention (CDC). The cooperative agreement program was titled "State and Local Comprehensive School Health Programs to Prevent Important Health Problems and Improve Educational Outcomes."

In the spring of 1994, questionnaires developed by the CDC Division of Adolescent and School Health were sent to the principal and the lead health education teacher in 345 secondary schools in the state. Usable

questionnaires were received from 252 principals and 244 teachers. The principals and lead health education teachers who responded are representative of secondary school principals and lead health education teachers in Missouri.

Survey results were compiled in the following categories: (1) overall results for all schools, (2) senior high school results for schools comprised primarily of grades 9-12, (3) middle school results for schools comprised primarily of grades 6-8, and (4) junior/senior high schools results for schools comprised primarily of grades 7-12. The results may be used to develop policies and improve programs for school health education, including HIV/AIDS prevention education.



Key findings

INFLUENCES ON HEALTH BEHAVIOR

- 50 percent of all schools did not use trained peer educators.
- 83 percent of all schools offered guest presentations and assemblies in addition to classroom instruction. 37 percent offered intramural fitness activities, and 31 percent offered school newspaper articles.

SUPPORT FOR SCHOOL HEALTH EDUCATION

- Only 11 percent of all principals reported that the school or district provided NO support for inservice training or staff development in health education.
- 29 percent of all schools had no one designated to coordinate health education.
- 54 percent of all schools had no active health education advisory council. Of those that did, teachers and school administrators were the most common members (42 and 36 percent respectively). 30 percent of schools had parents represented on the council, 21 percent had students represented, 9 percent had public health departments represented, and 7 percent had churches represented.
- 39 percent of the lead health education teachers involved parents in health instruction through homework assignments. 30 percent did not involve parents at all.
- 45 percent of principals reported that feedback from parents about health education in the school was mainly positive during the past year. 48 percent said parents provided no feedback.
- 92 percent of schools had a smoke-free policy, 93 percent had a drug-free policy, and 53 percent had a violence-free policy.

AMOUNT OF INSTRUCTION

- 86 percent of senior high schools required students to take one-half year or more of health education. 50 percent of all senior high schools scheduled health education at the 10th grade, while only 10 percent

scheduled it for 11th grade students and 9 percent for 12th graders.

- 61 percent of middle schools required students to take less than one-half year or more of health education. 86 percent did not require students to repeat health education if failed.

INSTRUCTIONAL CONTENT

- 96 percent of lead health education teachers attempted to increase students' knowledge about alcohol, tobacco and other drug use prevention. 77 percent attempted to help students improve skills to avoid alcohol and other drugs.
- 91 percent of lead health education teachers attempted to increase students' knowledge about tobacco use, and 63 percent tried to improve students' skills to avoid tobacco.
- 86 percent of lead health education teachers attempted to increase students' knowledge about HIV prevention, and 59 percent tried to improve students' skills to avoid HIV infection.

TEACHER PREPARATION

- 62 percent of all lead health education teachers' major emphasis of professional preparation was in physical education. 90 percent of all the lead teachers were certified or endorsed to teach health education.
- 65 percent of lead health education teachers had been teaching health education for more than five years. 26 percent of all lead teachers had attended no inservice training during the prior two years.
- More than 40 percent of lead health education teachers had received four or more hours of inservice training in alcohol and other drug use prevention and HIV prevention during the prior two years. More than 40 percent also indicated they would like to attend inservice on these topics.
- Less than 15 percent of lead health education teachers had attended inservice on violence and suicide prevention during the prior two years. More than 40 percent indicated that they would like to attend inservice on these topics.

1995 Missouri Youth Risk Behavior Survey

Executive Summary

The 84-item, multiple-choice Youth Risk Behavior Survey (YRBS) was administered to 4,900 students in 23 public high schools during the spring of 1995. The school response rate was 79 percent, and the student response rate was 80 percent. Survey procedures were designed to protect the privacy and confidentiality of all participating students. Participation was voluntary.

The students who participated in the survey are representative of students in Missouri. The results may be used to make important inferences concerning the health-risk behaviors of all Missouri public high school students in grades 9 through 12.

The YRBS was developed by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, at the Centers for Disease Control and Prevention. Representatives from 71 state and local departments of education and 19 other federal agencies also assisted with the design of the survey. Its purpose is to monitor priority health-risk behaviors that contribute to the leading causes of mortality, morbidity and loss of quality of life among youth and adults in the United States. These behaviors fall into six categories:

- Tobacco use
- Alcohol and other drug use
- Dietary behaviors
- Physical activity
- Behaviors that result in unintentional and intentional injuries
- Sexual behaviors that result in HIV infection, other sexually transmitted diseases (STDs) and unintended pregnancies



Key findings

ALCOHOL, TOBACCO AND OTHER DRUG USE

- 75 percent had tried smoking cigarettes; 30 percent smoked two or more cigarettes on the days they smoked.
- 83 percent had tried alcohol, 40 percent before the age of 13.
- 40 percent drank five or more drinks in a row sometime during the past 30 days. (44 percent male, 36 percent female; 34 percent of 9th graders, 37 percent 10th graders, 47 percent 11th graders, and 44 percent 12th graders)
- 26 percent had someone offer, sell or give them illegal drugs on school property during the past 12 months.

BEHAVIORS THAT RESULT IN UNINTENTIONAL AND INTENTIONAL INJURIES

- 45 percent had ridden in a vehicle during the past 30 days with someone who had been drinking alcohol.
- 30 percent of 11th graders and 31 percent of 12th graders had driven a car during the past 30 days when they had been drinking alcohol.
- 15 percent were in a physical fight on school property within the past 12 months.
- 8 percent had been threatened or injured with a weapon on school property
- 20 percent had made a plan about how they would commit suicide, and 9 percent attempted.

SEXUAL BEHAVIORS THAT RESULT IN HIV INFECTION, OTHER SEXUALLY TRANSMITTED DISEASES (STDs) AND UNINTENDED PREGNANCIES

- 54 percent had engaged in sexual intercourse during their lifetime (56 percent of males, 52 percent of females; 41 percent of 9th graders, 48 percent of 10th graders, 62 percent of 11th graders, and 69

percent of 12th graders).

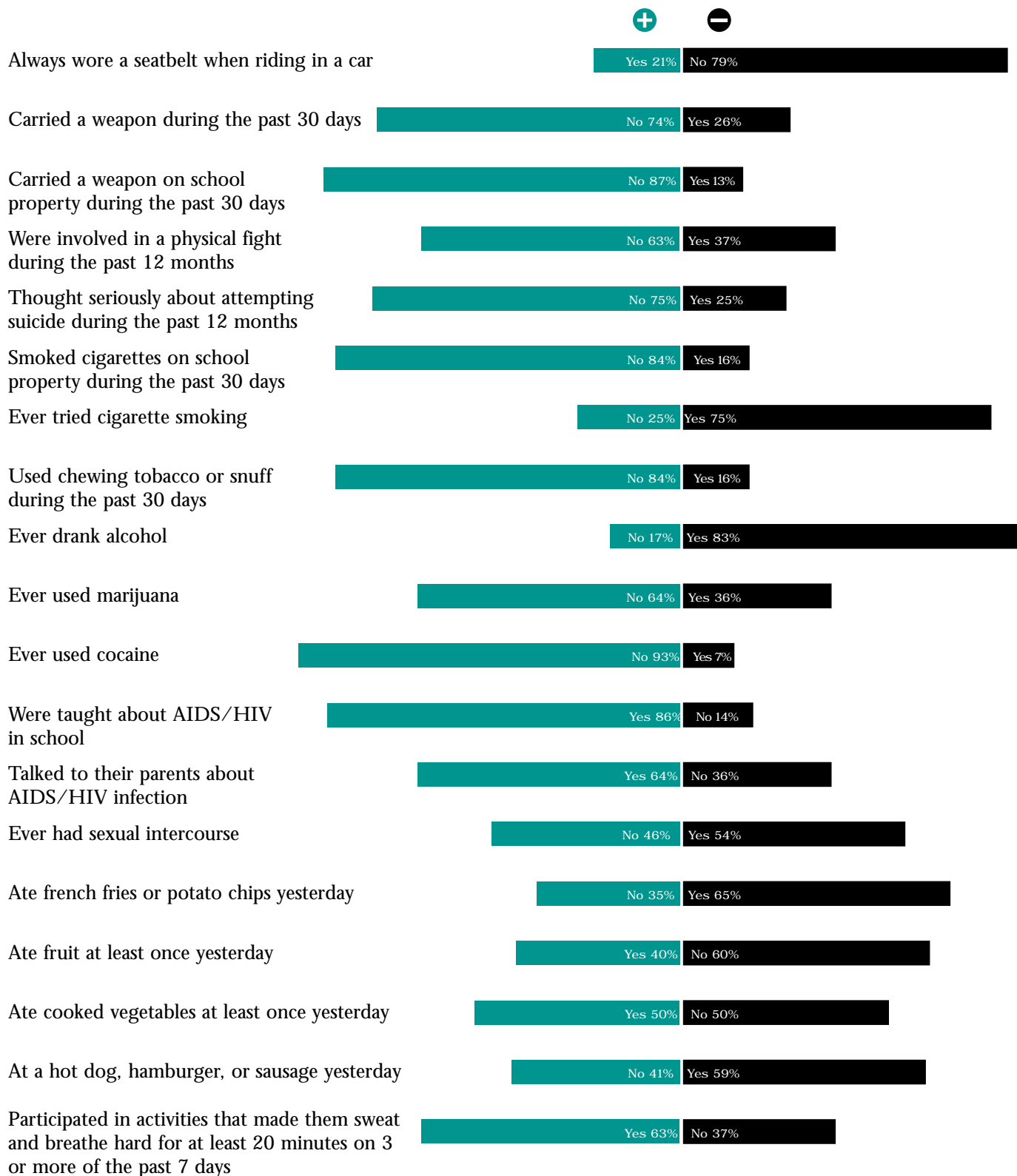
- 13 percent had sexual intercourse for the first time before the age of 13.
- 39 percent had engaged in sexual intercourse during the previous three months, of which 52 percent used a condom the last time. (60 percent of 9th graders, 56 percent 10th graders, 47 percent 11th graders, and 48 percent 12th graders)
- 64 percent had discussed AIDS or HIV infection with their parents or other adults in their family.
- 86 percent had been taught about HIV infection or AIDS in school.

DIETARY AND PHYSICAL ACTIVITY BEHAVIORS

- 60 percent ate fruit, 57 percent drank fruit juice, 50 percent ate cooked vegetables, and 29 percent ate green salad one or more times on the day before the survey.
- 65 percent ate french fries or potato chips, 59 percent ate hamburger, hot dog or sausage, and 64 percent ate cookies, doughnuts, pie or cake one or more times the day before the survey.
- 43 percent were trying to lose weight; 51 percent exercised to lose weight or keep from gaining weight during the past 30 days.
- 63 percent had exercised or participated in sports activities that made them sweat or breathe hard for at least 20 minutes on 3 or more of the past 7 days.
- 53 percent did stretching exercises and 50 percent did exercises to strengthen or tone muscles on 3 or more days of the past 7 days.
- 34 percent walked or bicycled for at least 30 minutes at a time on 3 or more of the past 7 days.
- 47 percent attended physical education class one or more days during an average school week (73 percent of 9th graders, 43 percent of 10th graders, 32 percent of 11th graders, and 32 percent of 12th graders).

Summary of 1995 Youth Risk Behavior Survey findings

PERCENT OF PARTICIPANTS WHO . . .





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